

# Notice of Allowability

Application No.

09/883,641

Examiner

Jonas N. Strickland

Applicant(s)

MATSUMOTO ET AL.

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 9/15/04.
2. ☒ The allowed claim(s) is/are claims 1-15, 17, 22, and 23.
3. ☒ The drawings filed on 18 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets" ) must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948 ) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

***Allowable Subject Matter***

1. Claims 1-15, 17, 22, and 23 are allowed.
2. The following is an examiner's statement of reasons for allowance: The instant application is allowable over the cited prior art, because the cited prior art fails to disclose a first catalyst component containing a refractory inorganic oxide carrying a platinum family metal, a nitrogen oxide adsorbent, and a hydrocarbon adsorbent; and a second catalyst component for the purification of nitrogen oxide; wherein the first catalyst component is disposed at a high concentration on the upstream side and the second catalyst component is disposed at a high concentration on the downstream side.

Noda et al. (US Patent 6,350,416 B2) discloses a system for exhaust gas purification disposed in the exhaust pipe of an internal combustion engine, includes an adsorbent formed by loading, on a monolithic carrier, which includes a zeolite (a hydrocarbon adsorbent) containing at least one kind of ion, which includes platinum, and nickel (a nitrogen oxide adsorbent; col. 4, lines 15-50). The catalyst material may be a platinum metal (col. 4, lines 26-29). Noda et al. continues to disclose wherein the adsorbent and the catalyst located downstream thereof are produced ordinarily using separate monolithic carriers (col. 8, lines 33-51). Noda et al. also discloses wherein in producing adsorbents the noble metals may be present in a heat resistant inorganic oxide or a zeolite (col. 8, lines 58-63). However, in the catalyst system disclosed by Noda et al., the first catalyst system corresponding to the adsorbent is disposed downstream of the loaded carrier, whereas the adsorbent of the instant invention is

disposed upstream of the second catalyst. Furthermore, Noda et al. does not disclose having an inorganic oxide.

Kurokawa et al. (US Patent 5,958,826), Horiuchi et al. (US Patent 5,911,961), and Farrauto et al. (US Patent 5,804,155) et al. also fail to disclose the instantly claimed catalyst system comprising an upstream/downstream arrangement of the two catalyst components.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 571-272-1359. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonas N. Strickland  
October 4, 2004



**STANLEY S. SILVERMAN**  
**SUPERVISORY PATENT EXAMINER**  
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